

# Exhibit 121

# Trading and Exchanges

## Market Microstructure for Practitioners

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OXFORD  
UNIVERSITY PRESS  
2003

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## Introduction

Markets are fascinating. They change constantly as prices adjust to new information, as winning traders replace losing traders, and as new technologies evolve.

Highly skilled professional traders employ clever strategies in their search for trading profits. They ultimately profit from investors, gamblers, and foolish traders.

The stakes in some markets are very high. Traders may arrange multi-million-dollar trades in seconds. They sometimes make or lose fortunes overnight.

The prices that traders negotiate ultimately determine how market-based economies allocate their scarce resources. Free economies owe much of their wealth to their well functioning markets.

### 1.1 SCOPE OF THE BOOK

This book is about trading, the people who trade securities and contracts, the marketplaces where they trade, and the rules that govern trading. You will learn about investors, brokers, dealers, arbitrageurs, retail traders, day traders, rogue traders, and gamblers; exchanges, boards of trade, dealer networks, ECNs (electronic communications networks), crossing markets, and pink sheets; single price auctions, open outcry auctions, and brokered markets; limit orders, market orders, and stop orders; program trades, block trades, and short trades; price priority, time precedence, public order precedence, and display precedence; insider trading, scalping, and bluffing; and investing, speculating, and gambling. This book will teach you the origins of liquidity, transaction costs, volatility, informative prices, and trader profits.

This book is not about the securities and contracts that people trade. We will not consider how to value them, who should trade them, how to design them, or how to issue them. Books about investments and corporate finance examine these questions.

*Market microstructure* is the branch of financial economics that investigates trading and the organization of markets. This field of study has substantially grown in size and importance since the October 1987 stock market crash.

This book presents the economics of market microstructure in simple English prose. Although some simple mathematics and graphics appear in a few supplementary examples, I fully explain all essential concepts in the main text.

### 1.2 OBJECTIVES

This book will help you understand how markets work, and how governments and exchanges regulate them. You will learn how prices come to